Claims

- [1] A rotary member mounting structure for mounting a second rotary member closely adjacent to a first rotary member that is supported on a rotary shaft, the rotary member mounting structure comprising: a rotation preventing means configured to prevent the first rotary member from rotating relative to the rotary shaft and to prevent the second rotary member from rotating relative to the rotary shaft; a first slide preventing member configured to prevent the first rotary member from sliding axially toward the second rotary member and to prevent the second rotary member from sliding axially toward the first rotary member; and a second slide preventing member configured to prevent the second rotary member from sliding axially in the direction opposite (i.e., away from) the first rotary member.
- The rotary member mounting structure as recited in claim 1, wherein rotary shaft has a larger diameter at a mounting position of the first rotary member and at a rotation prevention position of the second rotary member; an annular first installation groove is provided in the larger diameter portion of the rotary shaft; the diameter of the rotary shaft is smaller at a mounting position of the second rotary member; an annular second installation groove is provided in the smaller diameter portion of the rotary shaft; the first fastening member is a larger-diameter first fastening ring configured to be installed into the first installation groove; and the second fastening member is a smaller-diameter second fastening ring configured to be installed into the second installation groove.
- The rotary member mounting structure as recited in claim 1 or 2, wherein one or more grooves are provided in the external surface of the rotary shaft at the mounting position of the first rotary member and the rotation prevention position of the second rotary member, the groove or grooves being arranged to extend along the axial direction of the rotary shaft; one or more elongated protrusions are provided on an internal surface of the first rotary member and configured to mesh with the groove(s) of the rotary shaft; and a rotation preventing portion is provided on the second rotary member at the rotation prevention position of the second rotary member; one or more elongated rotation preventing protrusions are provided on an internal surface of the rotation preventing portion, the rotation preventing protrusion(s) being

AK-US065147 translation

configured to mesh with at least a portion of the groove(s) of the rotary shaft; and the rotation preventing means prevents rotation of the first rotary member and the second rotary member with respect to the rotary shaft by means of the meshing of the elongated groove(s) of the first rotary member and the elongated rotation preventing groove(s) of the second rotary member with the groove(s) of the rotary shaft.

- [4] The rotary member mounting structure as recited in any one of claims 1 to 3, wherein the rotary shaft is an output shaft of a transmission; the first rotary member is a drive gear supported on the output shaft; and the second rotary member is a speedometer worm gear supported on the output shaft.
- The rotary member mounting structure as recited in any one of claims 1 to 4, wherein the groove(s) of the rotary shaft is a spline groove; the elongated protrusion(s) of the first rotary member is a spline; the rotation preventing portion of the second rotary member is a rotation preventing boss; and the rotation preventing protrusion(s) of the second rotary member is a rotation preventing spline.